

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

Claims 1-15 (Cancelled).

61 16. (New) A thin film head having a reading part and a recording part comprising:

- an upper magnetic pole; and
- a lower magnetic pole having a lower magnetic main layer, a lower magnetic pole front end portion on the lower magnetic main layer, and a projection step portion on the lower magnetic pole front end portion;

wherein the projection step portion has a wider step portion at a predetermined depth from an air bearing surface which is wider than a width of the projection step portion at the air bearing surface, the wider step portion being wider than a width in a track direction of the upper magnetic pole at the predetermined depth from the air bearing surface.

17. (New) The thin film head according to claim 16, wherein the wider step portion has rectangular contours.

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18. (New) The thin film head according to claim 16, wherein the wider step portion has curved contours.

19. (New) The thin film head according to claim 16, wherein the wider step portion has flare structure contours.

20. (New) A thin film head having a reading part and a recording part comprising:

an upper magnetic pole; and

a lower magnetic pole having a lower magnetic main layer, a lower magnetic pole front end portion on the lower magnetic main layer, and a projection step portion on the lower magnetic pole front end portion;

wherein the projection step portion has a pair of wider step areas at a predetermined depth from an air bearing surface which are wider than a width of the projection step portion at the air bearing surface, and a width in a track width direction of the projection step portion at the predetermined depth from the air bearing surface is wider than a width in the track width direction of the upper magnetic pole at the predetermined depth from the air bearing surface.

21. (New) The thin film head according to claim 20, wherein each of the wider step areas has rectangular contours.

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22. (New) The thin film head according to claim 20, wherein each of the wider steps has curved contours.

23. (New) The thin film head according to claim 20, wherein each of the wider step areas has flare structure contours.

24. (New) A thin film head having a reading part and a recording part comprising:

an upper magnetic pole; and

a lower magnetic pole having a lower magnetic main layer, a lower magnetic pole front end portion on the lower magnetic main layer, and a projection step portion on the lower magnetic pole front end portion;

wherein a width in a track width direction of the projection step portion at an air bearing surface is substantially equal to a width in the track width direction of the upper magnetic pole at the air bearing surface; and

wherein a width in the track width direction of the projection step portion at a predetermined depth from the air bearing surface is wider than a width in the track width direction of the upper magnetic pole at the predetermined depth from the air bearing surface.

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25. (New) The thin film head according to claim 24, wherein the projection step portion at the predetermined depth from the air bearing surface has rectangular contours.

26. (New) The thin film head according to claim 24, wherein the projection step portion at the predetermined depth from the air bearing surface has curved contours.

27. (New) The thin film head according to claim 14, wherein the projection step portion at the predetermined depth from the air bearing surface has flare structure contours.
